



DEPARTMENT OF THE NAVY

BUREAU OF MEDICINE AND SURGERY

2300 E STREET NW

WASHINGTON DC 20372-5300

IN REPLY REFER TO

BUMEDINST 1543.1

BUMED-M15

21 Apr 2009

BUMED INSTRUCTION 1543.1

From: Chief, Bureau of Medicine and Surgery
To: Stations Having Medical Department Personnel

Subj: NAVY MEDICAL CLINICAL MODELING AND SIMULATION (M&S)
AUTHORIZATION AND USE IN TRAINING

Ref: (a) Chief of Naval Operations (CNO) for 2005 Guidance at:
<http://www.navy.mil/navydata/cno/clark/clark-guidance2005.pdf>
(b) Department of the Navy Objectives for FY 2008 and Beyond
(c) DOD Directive 5000.59 of August 8, 2007
(d) SECNAVINST 5200.38
(e) OPNAVINST 5200.34
(f) NAVMED P-5132
(g) NAVSUPINST 4200.81
(h) DOD Instruction 5000.61 of May 13, 2003
(i) SECNAVINST 5200.40
(j) Uniformed Services University Memo of November 23, 2007, Medical Simulation Initiatives

Encl: (1) Sample Request Letter for Approval of Navy Medical Clinical M&S
Technology Use and Training Management Plan
(2) Acronyms List

1. Purpose. To establish policy and guidance for Navy Medicine governing Clinical M&S devices and technologies consistent with established Department of Defense (DoD) and Department of Navy (DON) standards of operation, per references (a) through (j) which will enhance Navy Medicine capabilities. This instruction is for academic purposes, to enhance clinical knowledge and skill proficiency.

2. Background

a. Clinical M&S devices and technologies are valuable training tools used to integrate and strengthen clinical communications and functions in and reacting to health care team crisis situations and life-saving scenarios. The use of clinical M&S devices and technologies can enhance required skill sets through repetitive practice of critical thinking and physical skills. M&S also increases participative learning, may optimize practitioner confidence, and provide constructive feedback resulting in improved patient safety. Based on the Institute of Medicine's 1999 "To Err is Human" publication, the Joint Commission specifically cited simulation as a "best practice" to decrease errors and improve patient care.

b. Reference (a) summarized simulators as an effective and efficient training enhancement and modernization practice. Reference (b) focuses strategic priorities on providing first-rate facilities to support stationing, training, and operations of Naval Forces.

c. Business plans and operational commitments levy additional challenges to sustain integration capabilities with other Federal agencies. Navy Medicine clinical and operational training requirements demand a comprehensive attitude to meet this integration.

d. Clinical M&S device and technology procurement practices shall be coupled with sound training integration plans. Efficient acquisition and maximum tool use are goals of new technology applications. A coordinated acquisition and training plan can help achieve these goals, properly deploy advanced training technologies, and sustain maximum return on investment.

e. Reference (c) establishes policy, assigns responsibilities, and prescribes procedures for the management of M&S. Reference (d) complies with DoD directives and provides guidance for DON management of M&S. This instruction amplifies existing policy and guidance and specifically addresses Navy Medicine's responsibilities for Clinical M&S used in training.

f. Oversight of the Navy Medicine Clinical M&S Program is provided by the various components of the management structure described within reference (e). This higher authority organizational structure consists of:

(1) The Executive Agent for M&S, Navy M&S Governance Board comprised of the following membership:

(a) Training Community, represented by US Fleet Forces Command (FFC).

(b) Analysis Community, represented by Chief of Naval Operations (OPNAV) N81B.

(c) Assistant Secretary of Navy (Research, Development & Acquisition) (ASN(RD&A)) Community, represented by RD&A's Chief Engineer.

(d) US Marine Corps (USMC), represented by Marine Corps Combat Development Command's (MCCDC) Senior Analyst.

(e) A cross-section from other M&S communities, as appropriate, including but not limited to: Virtual Systems Command (SYSCOM), Total Force (OPNAV N1), Logistics (OPNAV N4), DON Comptroller, and Doctrine and Experimentation M&S, and Navy Warfare Development Command (NWDC).

(2) The Navy Modeling and Simulation Office (NMSO).

3. Applicability and Scope

a. This instruction applies to all Budget Submitting Office (BSO) 18 organizations with current or planned M&S for clinical education and training purposes.

b. This instruction applies to clinical Navy Medicine simulations, simulators and models purchased, used, or developed by Navy Medicine BSO 18 activities on or after its effective date. Models will include any physical, mathematical, or otherwise logical representation of an entity, object, person, service, or activity. Simulations include a technique for testing, analysis, or training in which real-world systems are used, or where real-world and conceptual systems are reproduced by a model, as defined in reference (c). Clinical simulation technologies include standardized patients, human patient simulators, task trainers, and computer-based and virtual reality platforms.

4. Policy

a. The goal of Navy medical education is to support the mission of Navy Medicine in Force Health Protection, integration of medical operations, and assure innovative medical education and training, that maximizes skills and confidence in the delivery of health care.

b. Navy Medicine shall be the primary prescriber for plans, evaluation, procurement approval, and implementation of clinical M&S devices and technologies.

c. Navy Medicine Manpower, Personnel, Training and Education (NAVMED MPT&E) will establish the Navy Medicine Central Simulation Committee (CSC).

5. Responsibilities

a. Navy Medicine Support Command (NMSC) will: Coordinate all clinical Navy Medicine M&S oversight with Navy Medicine CSC.

b. Navy Medical Logistics Command (NAVMEDLOGCOM) will:

(1) Perform a technical procurement review of submitted requests per Navy Field Contracting System (NFCS), per references (f) and (g), and enclosure (1) training management plan.

(2) Initiate and coordinate a CSC review.

(3) Coordinate results of both NAVMEDLOGCOM and CSC reviews.

(4) List purchase review status on the NAVMEDLOGCOM Web site under workload tracker.

c. NAVMED MPT&E Command will:

(1) Establish a Director, Medical Simulation to coordinate all clinical M&S initiatives, CSC reviews, and chair the CSC.

(2) Establish the CSC to:

(a) Provide Navy Medicine with a technically and clinically educated board comprised of clinical and administrative personnel participating in the decision process to identify and introduce new clinical M&S, evaluate cost-effective alternatives to these technologies, and determine equipment replacement cycles.

(b) Advise Chief, Bureau of Medicine and Surgery on professional education standards requiring clinical M&S technologies, clinical M&S curricula and training experiences, and oversight of Navy Medicine clinical M&S with health care industry standards.

(c) Serve as the BUMED appointed representative when called upon or directed to participate in forums that evaluate and assess simulation technology, coordinate policy development, and technology implementation.

(d) Serve as a representative or consult with the Navy M&S Office's Governance Board and the Navy Training Community lead, represented by USFFC.

(e) Convene the 1st quarter of each Fiscal Year to perform an annual review of clinical M&S NAVMED 6700/12, Capital Equipment Request or NAVMED 6700/13, Expense Equipment Request, and training management plans, per enclosure (1).

(f) Convene the 2nd month of each quarter, or as necessary, to review technological innovations and capital equipment replacement or upgrade requests, and forward review results to NAVMEDLOGCOM.

(g) Track and summarize Navy Medical clinical M&S assets and outcomes assessment to NMSC and the NAVMED MPT&E M&S Resource Repository.

(3) CSC will be comprised of the following membership:

NAVMED MPT&E Director, Medical Simulation
NAVMED EAST/Medical Director of Simulation
NAVMED WEST/Medical Director of Simulation
NAVMED National Capitol Area/Medical Director of Simulation
Navy Medicine Support Command (NMSC) Designee
Office of the Force Master Chief Designee

(4) Consultants: Selected specialty leaders and other key personnel may be consulted on a case-by-case basis. These may include, but are not limited to the following:

BUMED Education and Training Policy Designee
NAVMEDLOGCOM/Assistant Chief for Logistics/Designee
Navy Medical Training Center, San Antonio, TX Designee
Medical Corps Specialty Leader, Family Medicine Designee
NAVMED MPT&E, Integrated Learning Environment
NAVMED MPT&E, Expeditionary Programs Office
NAVMED MPT&E, Academics and Governance
NAVMED MPT&E, Staff Education and Training Designee
Uniformed Services University of the Health Sciences, Associate Dean for Medical Simulation
United States Marine Corps, Training and Education Command Designee
Marine Forces Command, Surgeon/Designee
Office of Naval Research Designee
Chief of Naval Personnel (CNP), Special Assistant for Research Management

d. Navy Medicine Regional Commanders. Appoint a Medical Director of Simulation to ensure support for clinical M&S efforts. Ensure distribution to and execution of this instruction by the medical activities under your command.

e. Commanders, Commanding Officers, and Officers In Charge

(1) With a Graduate Medical Education (GME) training program will appoint a Medical Director of Simulation to ensure technical support for clinical M&S efforts.

(2) Will procure clinical M&S technology following the processes and procedure outlined in reference (f), and submit enclosure (1) training management plan to NAVMEDLOGCOM.

(3) Will summarize clinical M&S assets and annual clinical M&S outcomes assessment per NAVMED MPT&E instruction.

6. Forms. The following Bureau of Medicine and Surgery forms are available electronically from the "Forms" tab at <http://navymedicine.med.navy.mil/default.cfm?selTab=Directives>: NAVMED 6700/12 (Rev. 11-2008), Capital Equipment Request and NAVMED 6700/13 (Rev. 11-2008), Expense Equipment Request.


A. M. ROBINSON, JR.

Distribution is electronic only via the Navy Medicine Web site at:
<http://navymedicine.med.navy.mil/default.cfm?selTab=directives>

BUMEDINST 1543.1
21 Apr 2009

**SAMPLE REQUEST LETTER FOR APPROVAL OF NAVY MEDICAL CLINICAL M&S
TECHNOLOGY USE AND TRAINING MANAGEMENT PLAN**

1543
Ser

From: Commanding Officer, Naval Hospital *****
To: Naval Medical Logistics Command, Attn: Code 03 Equipment Support,
1681 Nelson St., Fort Detrick, MD 21702
Via: Commander, Navy Medicine (East, West, National Capital Area, and Support Command)
Subj: REQUEST FOR PROCUREMENT OF NAVY MEDICAL CLINICAL MODELING
AND SIMULATION TECHNOLOGY EQUIPMENT FOR USE IN TRAINING
Ref: (a) BUMEDINST 1543.1
Encl: (1) Navy Medical Clinical Modeling and Simulation (M&S) Training Management Plan
(2) NAVMED 6700/12 or NAVMED 6700/13
1. Per reference (a), enclosures (1) and (2) are submitted.
2. My point of contact is Rank/Title First and Last Name who can be reached at commercial
telephone number, or DSN telephone number, and e-mail address.

SIGNATURE

Enclosure (1)

**NAVY MEDICAL CLINICAL MODELING AND SIMULATION
(M&S) TRAINING MANAGEMENT PLAN**

GOALS: To enhance knowledge, skills, and critical thinking abilities of learners while improving the overall safety and quality of patient care. To coordinate and manage Clinical M&S per DODDIR 5000.59 for more efficient use of training resources.

CLINICAL OBJECTIVES:

1. Describe your needs assessment supporting clinical M&S items for use in training.
2. Describe a detailed clinical M&S item usage plan to include goals, objectives, list of learner types, and planned assessment/evaluation tool/method.
3. Describe a periodic maintenance plan (3-5+ years) for clinical M&S training items.
4. List extended maintenance costs for clinical M&S items used in training.
5. List current subject matter expert (SME) who will be responsible for oversight, maintenance, and control of clinical M&S items used in training.
6. Outline future SME oversight, maintenance, and control plan for this clinical M&S training item.
7. Outline efforts to coordinate with equivalent medical organizations for evaluations of this and other M&S training solutions, possible cost savings from combining purchases, and/or conducting combined training.

For further information in completing this training management plan, contact:

Program Director, Medical Simulation Division
Navy Medicine Manpower, Personnel, Training and Education Command
8901 Wisconsin Avenue
Bethesda, MD 20889
E-mail: MedicalSimulation@med.navy.mil
Telephone Number: (301) 295-1688

ACRONYMS LIST

ASN (RD&A)	Assistant Secretary of the Navy (Research, Development & Acquisition)
BSO	Budget Submitting Office
BUMED	Bureau of Medicine and Surgery
DoD	Department of Defense
DON	Department of the Navy
CNO	Chief, Naval Operations
CNP	Chief of Naval Personnel
CSC	Central Simulation Committee
FFC	Fleet Forces Command
FY	Fiscal Year
GME	Graduate Medical Education
MARFORCOM	Marine Forces Command
MCCDC	Marine Corps Combat Development Command
MPT R&D	Manpower, Personnel, Training Research and Development
M&S	Modeling and Simulation
MTF	Medical Treatment Facility
NAVMED	Navy Medicine
NAVMEDLOGCOM	Naval Medical Logistics Command
NAVMED MPT&E	Navy Medicine Manpower, Personnel, Training and Education
NCA	National Capitol Area
NFCS	Navy Field Contracting System
NMSC	Navy Medicine Support Command
NMSO	Navy Modeling and Simulation Office
NWDC	Navy Warfare Development Command
OPNAV	Office of the Chief of Naval Operations
PPBS	Planning, Programming and Budgeting System
SEAT	Staff Education and Training
SME	Subject Matter Expert
SYSCOM	Systems Command
TECOM	Training and Education Command, US Marine Corps
USMC	United States Marine Corps